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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,007	03/07/2005	Klaus Schoeller	DE 020204	1124
24737 7590 12/10/2008 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER				
WALFORD, NATALIE K				
ART UNIT		PAPER NUMBER		
2879				
MAIL DATE		DELIVERY MODE		
12/10/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/527,007

**Applicant(s)**

SCHOELLER ET AL.

**Examiner**

NATALIE K. WALFORD

**Art Unit**

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2 and 4-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2 and 4-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/003)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

### **DETAILED ACTION**

#### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on November 12, 2008 has been entered.

#### ***Response to Amendment***

The Amendment, filed on November 12, 2008, has been entered and acknowledged by the Examiner. Claims 1-2 and 4-15 are pending in the instant application.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1-2 and 4-15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muto (US 6,670,765) in view of Karpen (US 5,961,208).

Regarding claim 1, Muto discloses a high-pressure discharge lamp (item 10) in figure 1 comprising: an inner vessel with a discharge chamber (item 2), with at least two electrodes (item 3) extending into the discharge chamber, and an outer bulb surrounding the inner vessel (FIG.1, item 1), wherein the discharge chamber contains an ionizable filling comprising: at least one rare gas (column 9, lines 45-47), 0 mg to 10 mg of mercury (column 11, lines 37-41) and a metal halide mixture comprising: 40 to 80% by weight of sodium halide (column 9, line 40), 25 to 55% by weight of scandium halide (column 9, line 40), 1 to 15% by weight of indium halide (column 5, lines 23-26), and 0 to 34% by weight of thallium halide, but does not expressly disclose that the outer bulb comprises glass doped with neodymium oxide, the neodymium oxide content being substantially 2 to 20% by weight with respect to the total weight of the outer bulb, as claimed by Applicant. Karpen is cited to show a high-pressure discharge lamp in figure 2 with an outer bulb (item 3) that is doped with neodymium oxide at about 4 percent (column 10, lines 53-63). Karpen teaches that by using neodymium oxide as a doping agent in the glass, yellow light is filtered out, thus favoring vision promoting red-green contrast detectors, to improve visual contrast, visual acuity, and better color recognition (column 9, lines 13-17).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Muto's invention to include the outer bulb comprises glass doped with neodymium oxide, the neodymium oxide content being substantially 2 to 20% by weight with respect to the total weight of the outer bulb as suggested by Karpen for favoring vision promoting red-green contrast detectors, improving visual contrast, visual acuity, and color recognition.

Regarding claim 2, the combined reference of Muto and Karpen disclose the high-pressure discharge lamp as claimed in claim 1, wherein a color point of the light emitted by the high-pressure discharge lamp in a CIE 1931 diagram has an X-color coordinate in a range from 0.345 to 0.375 (Muto; see FIG. 8), and a Y-color coordinate in a range from 0.350 to 0.375 (Muto; see FIG. 8).

Regarding claim 4, the combined reference of Muto and Karpen disclose the high-pressure discharge lamp as claimed in claim 1, wherein a color temperature of light emitted by the high-pressure discharge lamp lies in a range from 4300 K to 5000 K (Muto; see FIGS. 7 and 8 and column 10, lines 21-35).

Regarding claim 5, the combined reference of Muto and Karpen disclose the high-pressure discharge lamp as claimed in claim 1, wherein luminous efficacy of light emitted by the high-pressure discharge lamp is at least  $\geq 70$  lm/W (Muto; see FIGS. 5 and 7 and column 9, lines 15-17).

Regarding claim 6, the combined reference of Muto and Karpen disclose the high-pressure discharge lamp as claimed in claim 1, wherein a color point change with respect to an X-color coordinate and an Y-color coordinate in a CIE 1931 diagram amounts to  $\leq 6\%$  over a period of operation of the high-pressure discharge lamp of 1500 hours (Muto; see FIGS. 7 and 8).

Regarding claim 7, the combined reference of Muto and Karpen disclose the high-pressure discharge lamp as claimed in claim 1, wherein the at least one rare gas includes xenon (Muto; see column 9, lines 45-47), and the ionizable filling further comprises: 50 to 70% by weight of sodium iodide (Muto; see column 9, line 40), 30 to 50% by weight of scandium iodide

(Muto; see column 9, line 40), 1 to 15% by weight of indium iodide (Muto; see column 5, lines 23-26), and 0 to 10 mg mercury (Muto; see column 11, lines 37-41).

Regarding claim 8, the combined reference of Muto and Karpen disclose the high-pressure discharge lamp as claimed in claim 1, wherein the at least one rare gas includes xenon (Muto; see column 9, lines 45-47), and the ionizable filling comprises: 50 to 60% by weight of sodium iodide (Muto; see column 9, line 40), 35 to 45% by weight of scandium iodide (Muto; see column 9, line 40), 1 to 15% by weight of indium iodide (Muto; see column 5, lines 23-26), and 0 to 10 mg mercury (Muto; see column 11, lines 37-41).

Regarding claim 9, Muto discloses a lamp comprising an inner vessel (item 2) including an ionizable filling; and an outer bulb (item 2) surrounding the inner vessel, the ionizable filling comprising: at least one rare gas (column 9, lines 45-47), 0 mg to 10 mg of mercury (column 9, lines 45-47), and a metal halide mixture comprising: 40 to 80% by weight of sodium halide (column 9, line 40), 25 to 55% by weight of scandium halide (column 9, line 40), 1 to 15% by weight of indium halide (column 5, lines 23-26), and 0 to 34% by weight of thallium halide, but does not expressly disclose that the outer bulb includes glass doped with neodymium oxide, the neodymium oxide content being substantially 2 to 20% by weight with respect to the total weight of the outer bulb, as claimed by Applicant. Karpen is cited to show a high-pressure discharge lamp in figure 2 with an outer bulb (item 3) that is doped with neodymium oxide at about 4 percent (column 10, lines 53-63). Karpen teaches that by using neodymium oxide as a doping agent in the glass, yellow light is filtered out, thus favoring vision promoting red-green contrast detectors, to improve visual contrast, visual acuity, and better color recognition (column 9, lines 13-17).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Muto's invention to include the outer bulb includes glass doped with neodymium oxide, the neodymium oxide content being substantially 2 to 20% by weight with respect to the total weight of the outer bulb as suggested by Karpen for favoring vision promoting red-green contrast detectors, improving visual contrast, visual acuity, and color recognition.

Regarding claim 10, the combined reference of Muto and Karpen disclose a lighting unit (Muto; column 1, lines 9-16) comprising the high-pressure discharge lamp as claimed in claim 1.

Regarding claim 11, the combined reference of Muto and Karpen disclose the high-pressure discharge lamp of claim 1, wherein a color point of light emitting by the high-pressure discharge lamp in a CIE 1931 diagram has a X-color coordinate in a range from 0.350 to 0.370 (Muto; see FIG. 8), and Y-color coordinate in a range from 0.355 to 0.370 (Muto; see FIG. 8).

Regarding claim 12, the combined reference of Muto and Karpen disclose the high-pressure discharge lamp of claim 1, wherein a color point of light emitting by the high-pressure discharge lamp in a CIE 1931 diagram has a X-color coordinate in a range from 0.355 to 0.360 (Muto; see FIG. 8), and Y-color coordinate in a range from 0.350 to 0.375 (Muto; see FIG. 8).

Regarding claim 13, the combined reference of Muto and Karpen disclose the high-pressure discharge lamp of claim 1, wherein a color temperature of light emitted by the high-pressure discharge lamp lies in a range from 4700 K to 4800 K (Muto; see FIGS. 7 and 8 and column 10, lines 21-35).

Regarding claim 14, the combined reference of Muto and Karpen disclose the high-pressure discharge lamp as claimed in claim 1, wherein luminous efficacy of light emitted by the

high-pressure discharge lamp is at least  $\geq 75$  lm/W (Muto; see FIGS. 5 and 7 and column 9, lines 15-17).

Regarding claim 15, the combined reference of Muto and Karpen disclose the high-pressure discharge lamp of claim 1, wherein a color point change with respect to an X-color coordinate and an Y-color coordinate in a CIE 1931 diagram amounts to  $\leq 5$  % over a period of operation of the high-pressure discharge lamp of 1500 hours (Muto; see FIGS. 7 and 8).

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-2 and 4-15 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalie K. Walford whose telephone number is (571)-272-6012. The examiner can normally be reached on Monday-Friday, 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571)-272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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